



Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-41 (cancelled)

42. (new) A computer-implemented method of managing a process, said computer-implemented method comprising:

- identifying activities that comprise the process;
- identifying measurable drivers for each of the activities;
- identifying bridge variables, wherein each bridge variable is a driver that is relevant to more than one of said activities;
- establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only;
- using said relationship, representing each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities; and
- generating a model of said process at least as a function of said bridge variables by combining representations of all activities comprising said process.

43. (new) The computer-implemented method of claim 42, further comprising:
selecting a plurality of constraints,
and wherein generating said model of said process includes generating said model as a function of said bridge variables and said plurality of constraints.

44. (new) The computer-implemented method of claim 43, further comprising:
optimizing said model in view of said plurality of constraints using one of the following:
a linear programming algorithm,
a mixed-integer linear programming algorithm, and

a mixed-integer nonlinear programming algorithm; and
reconstructing a physical representation of said activities and said drivers using said
optimized model.

45. (new) The computer-implemented method of claim 44, wherein said reconstructing includes calculating a value of each non-bridge variable driver using values of corresponding bridge variables only, and calculating a value of each said activity using values calculated for each bridge variable driver and non-bridge variable driver of said activity.

46. (new) The computer-implemented method of claim 44, further comprising:
revising said model using the results from said optimization step.

47. (new) The computer-implemented method of claim 43, wherein selecting said plurality of constraints includes selecting economic and non-economic constraints.

48. (new) The computer-implemented method of claim 42, wherein identifying measurable drivers includes identifying economic and non-economic drivers.

49. (new) The computer-implemented method of claim 42, wherein identifying said drivers includes identifying at least one of fixed and variable components of each said driver, and wherein said method further comprising:

costing each said measurable driver for said at least one of fixed and variable components thereof.

50. (new) A system, comprising:
a computer;
input and output devices in communication with said computer; and
a memory encoded with a computer program, which, when executed by said computer, causes said computer to perform the following:
allow a user to identify activities that comprise a process,

further allow said user to identify measurable drivers for each of the activities,
identify bridge variables, wherein each bridge variable is a driver that is relevant
to more than one of said activities,
establish a relationship between various drivers by representing each non-bridge
variable driver in terms of one or more of said bridge variables only,
using said relationship, represent each of said activities at least as a function of
one or more of said bridge variables, thereby reflecting interdependence
between said activities, and
generate a model of said process at least as a function of said bridge variables by
combining representations of all activities comprising said process.

51. (new) The system of claim 50, wherein said computer program, upon execution by said
computer, causes said computer to further perform the following:
further allow said user to select a plurality of constraints;
incorporate said plurality of constraints in said model of said process;
optimize said model in view of said plurality of constraints using one of the following:
a linear programming algorithm,
a mixed-integer linear programming algorithm, and
a mixed-integer nonlinear programming algorithm; and
reconstruct a physical representation of said activities and said drivers using said
optimized model.

52. (new) The system of claim 51, wherein said computer program, upon execution by said
computer, causes said computer to perform said reconstruction by calculating a value of each
non-bridge variable driver using values of corresponding bridge variables only and by
calculating a value of each said activity using values calculated for each bridge variable driver
and non-bridge variable driver of said activity.

53. (new) A computer-readable data storage medium containing program instructions,
which, when executed by a processor, cause said processor to perform the following:

allow a user to identify activities that comprise a process;
further allow said user to identify measurable drivers for each of the activities;
identify bridge variables, wherein each bridge variable is a driver that is relevant to more than one of said activities;
establish a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only;
using said relationship, represent each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities; and
generate a model of said process at least as a function of said bridge variables by combining representations of all activities comprising said process.

54. (new) The storage medium of claim 53, wherein said program instructions, upon execution, cause said processor to further perform the following:
further allow said user to select a plurality of constraints;
include said plurality of constraints in said model of said process; and
optimize said model in view of said plurality of constraints using one of the following:
a linear programming algorithm,
a mixed-integer linear programming algorithm, and
a mixed-integer nonlinear programming algorithm; and
revise said model using the results from optimizing said model.

55. (new) The storage medium of claim 53, wherein said program instructions, upon execution, cause said processor to reconstruct a physical representation of said activities and said drivers by calculating a value of each non-bridge variable driver using values of corresponding bridge variables only and by calculating a value of each said activity using values calculated for each bridge variable driver and non-bridge variable driver of said activity.

56. (new) The storage medium of claim 53, wherein said program instructions, upon execution, cause said processor to cost each said driver identified by said user.